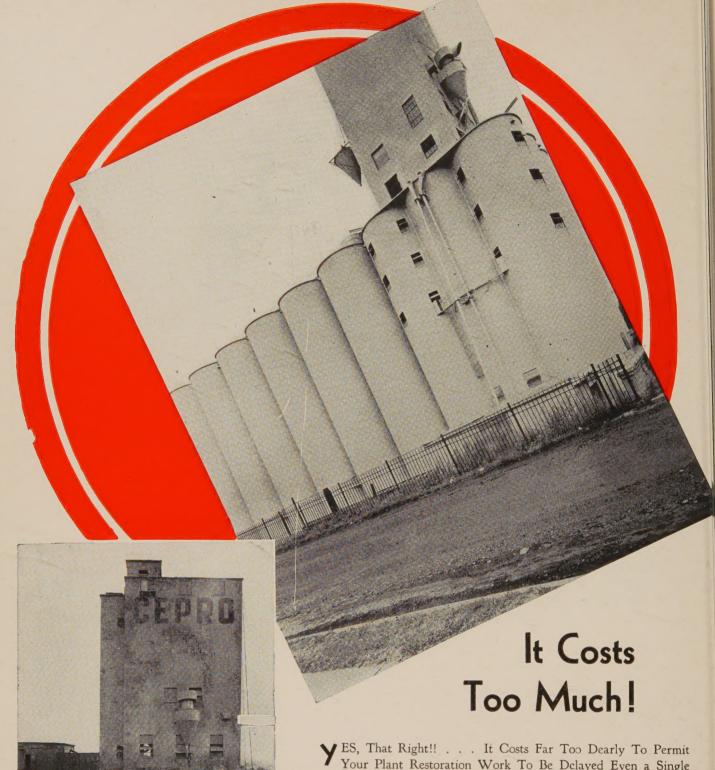


Final clean-up operations in the hold of a boat carrying grain down the lakes. Shown is the unloading crew removing the pulleys which facilitated the operation of the shovel rigs. These workers, wearing gunny sacks on their feet to keep grain out of shoes and trouser legs, will then sweep up the last of the grain.





Every Day The Elements Are Gnawing Away at Your Properties, Eating Up and Tearing Down Your "House Of Cards." Why Not Protect Yourself As Best You Can By Consulting With . . .

YES, That Right!! . . . It Costs Far Too Dearly To Permit Your Plant Restoration Work To Be Delayed Even a Single Season . . . Those With Costly Past Experience Know That The Rate Of Deterioration ZOOMS Upwards With The Passing Of Each Successive Year . . . Hence The Cost Of An Intelligent Periodic Building Maintenance Program Quickly And Profitably Liquidates Itself IN EVERY WAY!

YOU, Too, Will Find That Protecting Your Investment Is Especially Wise, Particularly When You Can Depend So Completely Upon . . .

John D. Bolton & Co.

Gunite Contractors



THE MAGAZINE OF PLANT MANAGEMENT AND OPERATION

DEAN M. CLARK, Publisher
NEWTON C. EVANS, Editor
FRANK J. SLEPICKA, Advertising
Director

REPRESENTATIVES

New York (17)
50 E. 42nd St.
Chicago (10)
100 W. Chicago Ave.

K. C. PRATT
MUrray Hill 2-3737
DWIGHT M. BLISH
SUperior 7-8734

SUBSCRIPTION

1 year \$2.00 Overseas \$3.00 3 years \$5.00 Single Copy 25c

SOGES CHAPTER MEETING DATES

1st TUESDAY — Minnesota SOGES Chapter. Ernest O. Ohman, Osborne-McMillan Elevator Co., Minneapolis, President; James Auld, Hales & Hunter Co., St. Louis Park, Secretary.

2nd TUESDAY — Omaha Council Bluffs SOGES Chapter. John T. Goetzinger, Rosenbaum Bros., Omaha, President; W. S. Pool, Nebraska-Iowa Elevator, Omaha, Secretary.

2nd FRIDAY—Central States SOGES Chapter. M. M. Darling, The Glidden Co., Indianapolis, President; N. R. Adkins, Ralston Purina Co., Lafayette, Seccretary.

3rd TUESDAY—Kansas City SOGES Chapter. Ralph Yantzi, Wolcott-Lincoln Grain Co., Kansas City, Kan., President; Robert T. Congrove, Standard Milling Co., Kansas City, Kan., Secretary.

3rd TUESDAY — Chicago SOGES Chapter. Edward Anderson, Norris Grain Co., Chicago President; Harry Hanson, Glidden Co., Chicago, Secretary.

3rd THURSDAY — Buffalo SOGES Chapter. Cornelius Halsted, General Mills, Inc., Buffalo, President; James Burns, Pillsbury Mills, Inc., Buffalo, Secretary.

Return of Newt Evans to Our Industry

By reputation, or personal acquaintance, most of our readers have known Newton C. (Newt) Evans for a long time. Hence, they'll welcome the announcement that he'll be back again soon in the grain and processing fold.

On June 20, he assumed the editorship of this publication and we predict that under his experienced guidance, this journal will become increasingly serviceable and readable.

In the grain and allied fields, Newt was previously editor of "American Elevator & Grain Trade", "Grain Man's Market Place" and "American Seedsman".

Recognized Authority

In flour and feed milling, he edited "National Miller", "The Mill Furnisher" and "American Miller", besides five editions of "Consolidated Grain Milling Catalogs", three editions of "Feed Trade Manual", and a number of textbooks.

He helped to organize the International Institute of Milling Technology and served as its secretary for several years. He is now an honorary member of that body.



For the past five years he has been in New Orleans directing the publication of a sizeable group of Southern business journals, (H. L. Peace Publications) starting newspapers and improving established ones. His return to grain handling and processing journalism is prompted by the magnitude of the field it serves, a belief in its vital importance and his own genuine liking for it.

Industry's First Inventor Related

A native of Philadelphia, Newt traces his ancestry in a direct line to Oliver Evans, the great early American inventor who revolutionized grain handling, et al. He was educated in the grade schools of that city, Central High School, Temple University, and Drexel Institute of Technology. He graduated as a mechanical and electrical engineer from Drexel Tech and while there was Editor-in-Chief of the college paper.

After spending several years in active engineering work, which included two years as superintendent of several graphite mines and refining plants, he was accidentally pushed into the publishing field because the president of the graphite concern owned a widely-circulated engineering journal. When his editor became ill, he asked Newt to take over the job temporarily. Handling it successfully he soon found himself saddled with a full time job—as his predecessor never returned. Newt found publishing work interesting and himself adapted to its demands, so he stuck to it steadily thereafter.

Ability Attracted Wide Attention

Later he came to Chicago to become editor of "American Artisan", a weekly paper devoted to heating, ventilating, sheet metal, hardware, etc. In this

Newton L. (Newt) Evans in his New Orleans Library-Study. The other walls of this editor's sanctuary are lined with authoritative texts of a pertinent nature — and through the windows back of him is a view of beautiful Lake Pontchartrain.

post he built a fine reputation with that industry and also drew the attention of other publishers. Shortly afterward he became connected with the grain and milling publications mentioned above and remained in this field until the interlude with Southern publications just concluded.

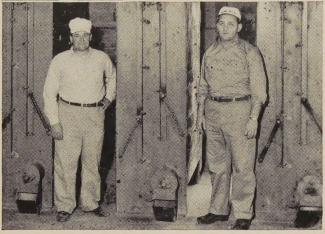
Newt is glad to be back in the grain and processing field, and modestly hopes he'll be able to serve the industry effectively. Besides his versatility, it might be noted that he's never satisfied with past achievements and is always trying to better them. Moreover, he believes that business papers should be edited from the readers' standpoint and not arbitrarily follow an editor's personal likes or dislikes. "You've got to know the reader," he insists, "instead of measuring him by a human-nature yard-stick."

DID YOU KNOW THAT-

The people of the United States, occupying only one-sixth of the world's land area, representing less than 7 per cent of the world's population, own:

- 85 per cent of the world's automobiles,
- 60 per cent of the world's life insurance policies,
- 54 per cent of the world's telephones,
- 48 per cent of the world's radio sets,
- 46 per cent of the world's electric power capacity.
- 35 per cent of the world's railway mileage,
- 30 per cent of the world's improved highways,
- 92 per cent of the world's modern bath-

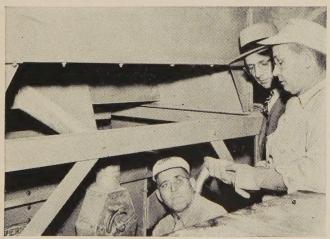
"These men can tell you...SUPERIOR grain cleaners are 4 ways better!"



WANT MICRO-ACCURACY? These Superior S 14 Width Graders installed in the National Oats Co. mill at Cedar Rapids, Iowa, are fitted with Superior's famous slotted screens, precision cut for unbelievably accurate gravity width separations. Simple in design, few moving parts, with ingenious rubber belt wipers to keep screens clean. A. S. Vermeersch, company secretary, says, "In our business we have to have precise, accurate separations. Superior machines give us this."



WANT SUPER FLEXIBILITY? Simple controls with flexibility of adjustment on this Superior "Country General 7" keep grain flow even and separations correct to the last kernel. Installed at the Kragnes Farmers Elevator and Mercantile Co., Moorhead, Minnesota, this machine operated by Melvin Uthe and R. W. Scott, pictured here, can at one time, and at full capacity, separate oats, wheat, medium length wheat, short length grains and small seeds from one another.



WANT HIGH CAPACITY? Superior sales manager Ira Willis checks the performance of this Superior AS 60 Aspirator with Superintendent A. W. Allred and A. H. Wilmes of Priority Mills, Minneapolis, Minnesota. This heavy-duty aspirator cleans hulls, dust and light screenings from enormous quantities of grain. With two double air ducts it can handle from 400 to 600 bushels per hour. Unusually high capacity in compact space is a famous feature of the whole Superior Line.

WANT REAL SERVICE? From engineer's drawing board to actual installation in your plant every Superior grain and seed machine is "tailored to measure"—not only for peak performance, but also through special adjustments to fit into the specific requirements of your own individual operation, taking into account local grain conditions, working space, funds and need for capacity. Superior makes sure you're satisfied before you pay . . . and keeps you satisfied with quick, helpful service.

WRITE for Superior's Installation Proposal Form and full details about Superior's complete line of machines for precision cleaning, grading, scalping and aspirating of grains and seeds.

SUPE SEPARATOR Hopkins



OUR INVESTMENT IN SAFETY P. L. BACHMAN IS WORTH THE COST

Safety Director, General Mills, Inc. Minneapolis, Minn.

Before attempting to prove that "Our investment in Safety is worth the Cost" I would first like to stress the fact that the primary justification for a safety program is moral or social obligation which we owe our employees to assure them a safe working environment. None of us can ever morally or socially justify an accident in our plant. We owe to our employees not only a fair return for a day's labor but also a safe place to work as well as a group of safe fellow workers. I feel that we are all indeed fortunate in that this obligation can be discharged at a profit and I mean that

In order to justify that statement it might be well to delve briefly into workmen's compensation insurance rate promulgation.

Workmen's compensation insurance rates are based almost entirely upon experience. Generally speaking, the rates for any one year are based upon the experience of the prior two or three year period after proper modication for changes in workmen's compensation law benefits. The total medical expense incurred and compensation benefits paid by the insurance companies are divided by the total wages reported to the insurance companies for that period. This determines the rate needed by the insurance companies for benefit payments. To this is added the amount necessary to defray insurance company profits and expenses such as: acquisition costs, claim expenses, engineering expense, administrative costs, taxes, and so forth. The relationship of benefits paid and expense in the premium dollar is generally 60-40, that is, 60c of every premium dollar must be used for payment of benefits and 40c for profits and expenses.

Actually in Minnesota the rating authorities have decided for the last several years that the split must be 61-39, that is, 61c for benefits and 39c

As you can readily appreciate, there are variations in the hazards of employment. For instance, the possibility of an accidental injury to a clerical office employee is far less than to a grain shoveller. In order to reflect these variations there are many payroll classifications in each state, believe four or five hundred in Min-

The previously quoted method of arriving at rates is applied to each of these many classifications to arrive at what we term manual rates for each classification. After these manual rates have been determined they are again modified to reflect the actual experience of each company or assured. To illustrate this latter point, let's assume that there are two terminal elevators located in Minneapolis and that they both have an annual payroll of \$100,000. Let's assume further that the manual rate, that is, premium per \$100.00 payroll for ter-

minal grain elevator employees, is \$2.00 before any company experience modification has been applied. I believe this rate in Minnesota at this time is \$1.94. Now let us assume that Elevator "A" has had comparatively good experience during the prior three years and has suffered only five or six minor accidents, but that Élevator "B", on the other hand, has had several accidents, three or four of which have been serious. Elevator A would receive a very substantial rate credit modification, possibly as much as 50% because the benefits the insurance company have paid out have been small in comparison to the premuim they receive. Elevator B would receive a very substantial rate debit modification, possibly a 100% or even more, dependent upon the seriousness of the accidents.

Under these circumstances, Elevator A would then have a net rate of \$2.00 less 50% or \$1.00, which applied to the \$100,000 anual payroll, would result in an annual premium of \$1,000. Elevator B would have a net rate of \$2.00 plus 100% or \$4.00, which applied to the \$100,000 payroll, would result in an annual premium of \$4,000 or, in other words, four times as great as Elevator A. Obviously Elevator B is under a serious competitive handicap. This illustration is no exaggeration because it is not uncommon to see rate credit modifications of 50% or greater and rate debit modifications of 100% or greater. I can recall very well our own company having rate credit modifications in Minnesota of over 60%. From the above illustration you can readily understand that "Our Investment in Safety is Worth the

But even greater savings can be realized in the reduction of secondary costs of accidents following a successful accident prevention program. Mr. W. H. Heinrich, Supervising Engineer of the Travelers Insurance Company, after an exhaustive analysis of some 5,000 industral accidents, has determined that the secondary cost of accidents is approximately four

times the compensation benefits and medical expense. Among others, these secondary costs include the following: reduced production because of in-efficiency and nervousness of the rest of the personnel immediately following a serious accident, reduced efficiency because of the lack of training of the new man that has replaced the injured worker, reduced production because of damage to equipment, additional cost because of hiring a new employee to replace the injured employee, increased cost resulting from accident reports and accident investigations, loss due to damaged equipment, buildings and

The above comprise some but not necessarily all of the secondary costs of accidents. Returning to our previous illustration, let's assume that the few minor accidents which occurred in Elevator A resulted in insurance company compensation payments of \$300.00 and medical expense of the same amount or a total of \$600.00 paid by the insurance company. The secondary cost of these accidents would then be 4 times \$600.00 or \$2,400. In the case of Elevator B, let's assume that one of the accidents resulted in permanent total disability with the resulting compensation benefit payments of \$5,000 with medical expense of \$3,000, or a total of \$8,000. The secondary cost of accidents then at Elevator B would be four times \$8,000 or \$32,000. This would indeed put Elevator B in a very severe competitive position.

In closing, let me suggest that you secure from your Insurance Department a statement indicating the workmen's compensation benefits and medical expenses paid by your insurance carrier last year. Multiply this figure by four and add to it your workmen's compensation insurance premium for the year. You will then have a figure upon which to base your safety budget. If you have had adverse experience I am quite sure that vestment in Safety is Worth The (Before SOGES Convention).



BEATS HEAT, SWEAT AND COLD WITH AIR-CELL INSULATION . . . Marietta Air-Cell staves give each bin hollow-wall construction . . . which means better control over heat, cold and moisture, absolute dryness in all kinds of weather, and keeps grain from freezing.

INSIDE PRESSURES CAN'T HURT A MARIETTA AIR-CELL BIN . . . Trusslike design plus all-around tamping of the 4" thick Air-Cell staves gives a Marietta Storage System structural strength from two to three times greater.

NO CONSTRUCTION WORRIES . . . MARIETTA ERECTS BINS FOR YOU . . . We offer complete Designing and Engineering Service. Materials are sent directly to your site by truck or rail . . . our expertly trained construction crews do all the work, this being included in the purchase price.

BE READY FOR WHEAT AND CORN STORAGE!
. . . Don't let lack of storage bin space keep you from sharing in the grain storage program. Marietta storage bins are available now from each of the three Marietta plants.

For fast action, write, wire or telephone our nearest office

THE MARIETTA CONCRETE CORP.

MARIETTA, OHIO

Branch Offices: BALTIMORE 21, MD., Race Road and Pulaski Hwy. CHARLOTTE, N. C. Box 1575



This Marietta Air-Cell stave gives

you locked-in air insulation.

Symposium on Paper Grain Doors is Scene of Lively Discussion at SOGES Convention

MODERATOR: ROBERT R. BREDT

Now, gentlemen, this symposium is an effort to come to a more clear understanding of the use of paper grain doors and to determine whether or not they have a spot in our industry. This discussion is patterned somewhat after a similar meeting which our Minneapolis Chapter held last Fall and in which some of these same gentlemen participated.

With such a wide representation here from all parts of the United States and Canada, it does seem that we should reach some definite conclusions this afternoon on the use of paper doors. Now, the Minneapolis market, I know definitely-and I understand also the Milwaukee and Chicago markets, are not yet convinced that the paper grain doors are doing either the railroads or the industries any particular good. We have a conflicting opinion-at least we understand that is so-from the Southwest, where they seem to be getting along pretty well with them. Now that we have all these different sections of the country together, we should be able to iron out some of the prob-lems. Now to start our discussion, each member of the panel will make a brief statement and give his opinions and conclusions on the use of paper doors. Now, I have requested the panel to make their statements very brief, and if they don't cover everything you think they ought to cover, that's your clue to ask questions when the meeting is thrown open to the floor. We want to give everybody a chance to get in on this discussion if there are any questions or anything that is not understood about the use of these doors. After the members get through with their statements, then we will throw the meeting open to discussion, and anybody who has a question to ask or wants to get up here and make a statement, we wish you would do that because that's the only way we can get to the bottom of this problem. If you have merely a question that you want to direct to any member of the panel, will you please address your question to the chair. I will repeat the question so that the entire audience here will hear it and understand it, and we also want to get it on to our recording machine here so we will have a record of the complete meeting.

If you have a statement you want to make regarding some experience with the doors, either for the doors or against, will you please come up here and speak through the microphone so that everyone will have a clear understanding of what is going on.

MR. LARSON:

Mr. Chairman, gentlemen, I first want to express my feeling of gratefulness for being invited to attend this meeting. I consider it an opportunity and I hope it is going to be constructive and I hope to be helpful to you.

I had the opportunity, last Fall, of attending one of the meetings of your local Chapter, which, in my opinion, was very successful, and I believe some constructive information came out of it.

With regard to the use of Signode grain doors, they were first inaugurated by the Western Weighing and Inspection Bureau at Enid, Oklahoma in June of 1947. Since that time we have progressed the use of these doors in sixteen of our terminal markets, and in most of which the coopering is performed by our own employees, and in some other markets the doors are being installed by the shippers. This was somewhat of a departure from our regular operation and we have found some complications that have arisen, but thankfully, I can say I think we have successfully overcome all that have shown up so far. We were first confronted with the problem of making the doors available along the coopering tracks and still protect them from the weather, which involved the construction of storage boxes, etc., with which you gentlemen are familiar here at the Minneapolis market and



Three SOGES Stalwarts — Charles J. Winters, President, Clifford A. MacIver, Past President, and Frank J. Kohout, Associates' chairman.

PANEL CONSULTANTS:

MR. W. M. CRYSTAL-Advisory Board-and Supt. of Transportation for the Sioux Line.

MR. GEORGE MURPHY – The Signode Company, Chicago, Ill.

MR. J. E. LARSON — Western Weighing & Inspection Bureau, Chicago.

MR. T. ALDO JOHNSON-Traffic Mgr., Van Dusen-Harrington Co., Mpls.

the other markets where we are now using this type of door.

The Signode door has proven, in our opinion, quite successful as a means of reducing doorway leakage. In the first place, it has the 8 inch floor flap which extends out on to the car floor, which eliminates, to a large extent, all possibility of leakage on to the barricade. The doors are 90 inches wide, which permits a 9 inch coverage over the side wall of car beyond the door post and there have been very few instances where we have had reports of leakage between the barricade and the door posts. Being a solid unit and 72 inches in height, it also disposes of the problem of doors falling down or being knocked down without being replaced with resultant leakage over the top of the barricade.

We have had some failures with Signode doors which we are frank to admit. We didn't expect 100% performance, and I don't think anyone else expected 100% performance out of us, but by and large, from the useage that we have had from this type of barricade so far, we consider that it has been very successful. In the past two years now, since we have had this barricade in service, we have used in the neighborhood of 60,000 doors which represents, in round figurse, 30,000 cars, and the number of reports of failures in those cars that have come to us have been practically negligible. In my opportunities to talk with elevator superintendents throughout our territory, I have inquired as to how they were getting along with unloading operations and whether they have run into any complications in their unloading operations and it is very sel-dom that we ever find a report that any real difficulty is being experi-

Now, we don't have all the answers, but if we can be helpful to you in giving you the benefit of our experience, we will be glad to try to answer any of your questions. I thank you.

MR. JOHNSON:

During the war because of the scarcity of lumber, a number of the grain carrying railroads, especially in the Northwest and Southwest, experimented with the Signode paper doors. A representative of the Western Weighing and Inspection Bureau called on a number of grain shippers and asked that they cooperate and our company was one of the many

that agreed. A number of cars were loaded in the country with paper doors and unloaded at our terminals. We found upon arrival of the cars that it was difficult to open the outside or storm door due to the bulg-ing of the grain door. In the case of the wooden door the grain inspector could use his bar and move the door, but in the case of the paper door, this could not be done. The car was followed through to the unloading elevator and we experienced difficulties in cutting the paper doors so as to unload the contents of the car. This, I repeat, was still in the experimental stage. We were told after we became accustomed to handling the paper doors we would have no difficulty.

It was mutually agreed that the paper doors would not be used at country stations because two men were needed to install the doors whereas only one man is needed to install a wooden door. Since that time the paper doors have been generally in use at the Twin City, Duluth, and Superior terminals. It was intended to use only the paper doors on cars moving beyond the rails of the home line.

We all are familiar with the official inspections on grain which often change the destination of the car with the result that many cars that are coopered with paper doors are unloaded within or between terminals of the home lines. Intra and inter-terminals and on home lines.

We have had complaints from our own elevator superintendents and employees as well as complaints from buyers of the grain whether unloaded at large or small plants. Among the complaints we have is the ever constant hazard of metal strips projecting from the doorways and protruding nails causing injuries of all sorts to the men unloading the car. The hazard because of the 6 inch strip that is nailed to the floor which comes in contact with the shovel causing injuries by tripping or other accidents. Then, of course, there is the fire hazard of all the paper and debris that accumulates after the car has been unloaded. It certainly is no saving as to the turn-around or car use in that many cars have to be placed on the cleaning track before they can again be used for grain or any other loading. We find too that many cars cannot be sampled until they reach the elevator pit due to the bulging doors which causes a delay in running the car through and subsequently set back and unloadednot only delay but expense to the elevator operator.

From what we can learn, one man can cooper a car with wooden doors in 15 minutes while it takes two men 30 minutes to cooper a car with paper doors. This results in delay at the loading elevator and the only way this delay can be avoided is to have a bank of cars against the elevator prior to the time of the loading which could result in further car delay and demurrage cost to the shipper.

We do know that paper doors are cheaper per unit but the final cost including loss of car days I believe off-set the saving made at the time of the installation of the doors.

We have had many complaints because of loss of grain due to the use of paper doors. In fact, we know of cases where with ordinary handling at the loading elevator when moving cars down to the lower end of the



Greater Safety

Removal of obnoxious dust concentrations minimizes explosive and fire hazards. A dust free plant reduces accidents. Cleaner air protects workmen's health and safety . . . helps prevent absenteeism.

Improved Cleanliness

Reduces dust accumulations on beams, window ledges and machinery thus cutting housekeeping costs. Keeping dust out of machines prolongs their life . . . minimizes repair and replacement.

Increased Efficiency

Improves working conditions and workmen's efficiency. Cleaner machines run smoother and give faster, more efficient production.

You get all these benefits with DAY Dust Control plus years of dependable, economical service.



IN CANADA: P.O. Box 70, Ft. William, Ont. Branch Plants in Ft. Worth, Buffalo and Welland, Ont.

track and bumping into other cars, cars coopered with paper grain doors have burst resulting in the loss of grain and making it necessary to take the car back to the elevator and unload and reload in order to obtain an official weight. I say that this is no case of careless handling of the car, but ordinary handling of the car at the elevator. We know of a specific instance where some ten cars were handled in this manner, and the ones with the wooden doors held the load while several with paper doors had to be reloaded.

What proportion of the cars are being coopered with paper doors as against wooden doors I don't know, and as mentioned above, it has been our purpose to cooperate with the carriers, but because of the personal injury hazards, fire hazard and the claims for loss, we strongly recommend that paper doors be discontinued until such a door, single or otherwise, has been built so as to remove the hazards mentioned.

MR. C. J. WINTERS, Public Grain Elevator, New Orleans, La.:

Paper grain doors, we were given to understand, was a war time expedient. They were used originally because lumber for wooden doors was almost impossible to get, and when it could be gotten, the cost was prohibitive. Paper grain doors, as one of the men of the panel mentioned a few moments ago, were originally used at Enid, Oklahoma. It so happens that most of the grain that goes out of Enid, Oklahoma for export goes out through the Port of New Orleans, so that we, at the export house at New Orleans, have been the media with the results obtained from paper grain doors since their inception, and I can tell you that they haven't been very gratifying.

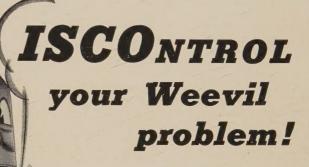
Our experiences with paper grain doors have been bad, and although we were told following the meeting up here that they would probably get better, we have definitely noticed no improvement in the recent past. If Mr. Johnson was up here recalling the experiences at New Orleans with paper grain doors, he couldn't have given you a more faithful outline than I could because the experiences that he recounted exactly paralled our own. I'm told that some of the elevator operators in the Southwest (shipping elevators, undoubtedly) aren't finding any fault with the paper grain doors, but I'm inclined to believe that that's true. I can see where a fellow who spouts grain in there with a small spout doesn't get too much pressure on the door at one time and he ordinarily wouldn't have too much trouble with the door. Of course, that's a lot like the experience my sister had with a colored girl who was working for her at one time. Her husband died - and the next day after she buried him, she

came back to work for my sister and my sister told her, "I want to express to you my deep sympathy for your misfortune." And the girl replied, "Madam, it's his misfortune — not mine."

Now, we have had a lot of misfortune with paper grain doors at New Orleans, but I don't expect those who have been loading grain in cars with paper grain doors to recount the same kind of misfortune, because the two operations are entirely dissimilar.

As Mr. Johnson so very aptly stated, paper grain doors are a very, very expensive item to the railroads who have sponsored them. We have

had any number of cars very seriously delayed because we couldn't get into the doors. In New Orleans, it is the practice, as I suppose it is in most of your markets, to draw samples from the car while the car is outside of the elevator tracks. In a great ma-jority of cases, that can't be done because by the time that car comes from up here in the North somewhere, we, down in the deep South, must keep going around in these railroad yard in hops. Most of those paper doors are so fragile that they have bulged out and they're laying just smack up against the storm door -and you just can't open that door to save your life unless you just rip the paper door right open, and when



When you use LARVACIDE, you get control plus! LARVACIDE not only handles granary weevil and rice weevil, but is also deadly to lesser grain borer, saw-toothed grain beetle, flat grain beetle, Mediterranean flour moth and grain mites. Easily applied when receiving or turning, LARVACIDE's kill includes egglife and larvae. There's no explosion or fire hazard, and LARVACIDE's tear-gas warning cuts accident risk.

KILLS RATS TOO!

LARVACIDE at low economical dosage drives them out on the open floor to die, where they may be swept up without carcass nuisance! Fast airing—overnight exposure.

ISCOSPRAY SERVACIDE

Contact and fume sprays with LASTING KILLING POWER! Use on bin tops and bin bottoms, when empty.

INNIS, SPEIDEN & CO.

117 Liberty Street NEW YORK 6, N. Y.

Boston - Cincinnati - Omaha Chicago - Cleveland - Philadelphia

Larvacide

You can get your supply of LARVACIDE in handy 1-lb. bottles, 12 to wooden case, or in cylinders from 25 to 180 lbs.

you do it means you've got grain all over the tracks out in some yard somewhere and you have to go out and pick it up with a shovel in sacks. In addition to that, we cut the doors in some instances, but in others we try to use the door parts that were used on the wooden doors. It so happened that one day we got a call from the general manager of our switching facilities-the railroad that does our switching at New Orleans—who informed us that the Grievance Committee of the Switchmen's Union had been in to see him and told him that they refused to pull any more cars out of the Public Grain Elevator because so many of the switchmen had suffered cuts and bruises because of the wire bars that are used to secure the doors being stuck out of the door while the car was being pulled into the yard-cutting the switchmen about their heads and shoulders; as a consequence of that we now have to close every door that has a paper grain door on it and it very often happens that a car with both doors closed is taken out into the switching facilities yard and later brought back in there again for us to unload as a loaded car. That has happened any number of times.

I know that some of you gentlemen down here know that we were very fortunate in the grain elevator at New Orleans to be able to win the Safety Contest of this Society a few times. Since paper grain doors have come into use, however, our safety record has been all shot plumb to hell. We'll never win another safety contest as long as we unload cars with paper grain doors in them because the record will show that a large percentage of our accidents re-

cently have been due entirely to paper grain doors. Paper grain doors were assuredly a war time expedient and, in our opinion, they should be treated as a war time expedient and done away with as soon as possible.

MR. C. WALLACE CLARK: Anheuser-Busch, Springfield, Mo.:

It so happens that we had experience in our plant with receiving cars with paper grain doors, and those cars came from the West coast, and after being handled by two or three railroads, were delivered to our door. We had the same experience as stated before; as far as the segregating (?) were unable to do so. We have had no accidents, as yet, with the doors, but we find that in the unloading of these cars the bulky condition at the door hampered us a good deal. Now, there is a board at the top of the door and one at the bottom -1 inch by 6 or 8 inches. Now, had there been two more boards between these top and lower boards, I believe a lot of the. trouble could be eliminated, and it could be made possible for the in-spector to open the outside door.

I haven't had any experience as far as loading out cars from our plant as regards paper grain doors. To sum it up, we feel that the doors may be all right for short distances only.

MR. MURPHY:

I would just like to make the comment to Mr. Clark that he has had trouble with doors closing, coming in from the West Coast. That's on that Hanna barley, and we know there have been some bulgy cars com-

ing in from there, and I would also like to thank Mr. Clark for the suggestion he had for eliminating that bulge. Now that is what counts in this type of a meeting; you have a problem – you talk to us about it – we like to have your expressions also. And further, adding to this Hanna barley that is being loaded on the West coast, we are now loading 147 cars in Oregon that is destined for Milwaukee and St. Louis and at Anheuser Busch they will get some of those. They are coopered differently and, we hope, a lot better than the ones you got last Fall. Now, for further information on that, that Hanna barley is loaded at trackside. There are no elevators or ways of storing it so the shipper brings it out to the car that is set on some siding and they load from the ground with a portable elevator, and oftentimes they don't get the loading side door up correctly. They can only put it up partially when the load is started and then they finish it off later, and that is where most of our trouble has originated. But now the Southern Pacific is cooperating with us, and they have a freight service inspector up there and we have one of our men there, and we are going to be there when they load all these cars, and we think Thanks, we'll have that whipped. Mr. Clark, for your suggestion.

MR. W. F. WEATHERLY-Galveston Wharves, Galveston, Texas:

I just wish to concur in the statement that Mr. Winters has just made relative to the objection of the switchmen regarding paper grain doors with their fault of bands used in securing the doors. We have been injured by that and called on our general manager to close the doors when used with paper grain doors, and, furthermore, there is one other thing we are having trouble with and that is other stations that are using cars that have been previously using crane doors. When we use the grain door remover, the band holding the door is still a factor creating a hazard to the workmen. When they are injured in such manner, of course, it is a matter then of placing the responsibility of that old band remaining in the car. Our lawyers are working on that, and they are seeking to place the responsibility on the railroad company for using the bands in the first place. So that is another angle in this matter - if the car is not properly coopered, we cannot place the responsibility of the injury on the grain elevator. I thank you.

Mr. H. F. GRAVES, The Capitol Elev. Co., Duluth, Minn.:

I want to concur with the opinion of the gentleman from Galveston in what he said about the wires, or bands. These things happen every



day in my plant. We unload in the neighborhood of 100 cars a day, and at times the men are independent and won't even come into the yard if we don't fix the cars. Time is another important factor. If the elevator is equipped with an automatic car pusher, you can get a wooden door car half unloaded before you can get your paper door car opened, and then when your paper door is weighed the strips, rubbish must be taken care of. You have to close the door, and even then, when they are opened in the yard off come the iron bands and your switchmen, car sweepers, and other helpers are apt to get hurt.

MR. JOHN KITCHING – G.L.F. Mills, Buffalo:

We, in Buffalo, are against these doors also, for all the reasons that have already been offered but these gentlemen have missed one reason that hasn't been brought up, and that is the fact that they are supposed to use a double headed nail in these doors when they cooper them, and somehow or other they don't use the double headed nail. In my plant we unload around 60 cars a day and most of them are taken right around the corner to the mill to be loaded, and our men probably spend an hour cleaning the bands out of the cars from day to day. If they had the double headed nails in them, maybe it would have been a little easier, but I am still against them. Everything these gentlmen said is true accidents, accumulation of junk around the plant, etc. The railroads used to have the cars cleaned but now we have to do it ourselves so it always comes right back to the unloaders to clean out their own cars. I am definitely against paper grain

MR. NORMAN OLSON, Archer-Daniels-Midland Co., Great Northern Elevators, Superior:

I don't blame you fellows for being afraid of this thing here - I don't like them myself. They might jump out and bite you. You're asking for opinions on car dump operations with the paper grain door. We have found at our plant that these paper grain doors are definitely a hazard on top of all the other things that have been referred to here on unloading. At the car dump it is impossible to open that car door until it gets on the pit or in front of (or on) the dump. When it gets on the dump, then you have to use chains and the automatic car door openers and a man has to take the chance of standing up on a little platform that he puts one foot on and the other one up on the car and tries to work this arrangement with probably a drop of 8 to 10 feet below him. If he loses his footing you have a severe accident. When he finally gets the storm door open, puts the ram in up again it, your strips of iron are coming from both sides of the door — they pull out of the paper — you tip your car one way — back again — get your grain out — and then get in to sweep it — and you duck these strips from all angles. They are a hazard regardless of which way they are handled on the dump.

MR. MURPHY:

Well, I was pretty well sold on this door when I came in here. It seems to me that we have been talking a lot of generalities. I know that it is hard to open a stubborn door, but I was wondering, as a member of this Society, if we could not get some definite figures on this — that is, percentage figures on how many cars are hard to open against how many are not hard to open — that is, those coopered with Signode doors.

Now, we want to work with you on this. If this stubborn door proposition is one-tenth as bad as I am led to believe here then I am certainly going to have to put a lot of time on it. I'm the engineer on this door from the beginning and am still working at it, and if it is as bad as some of you boys say it is, we certainly have to do something about it - but before we do that if we could just get a percentage; how many cars do you get in your plant that you have to use force on - or how many come in that you can open easily - and also compare them with those cars that come in with wooden doors - and how many of them are hard to open.

Mr. Wallace Clark said he would be glad to co-operate with Mr. Murphy on this and would check the cars coming in from the coast.

MR. MURPHY:-That's fine, Mr. Clark. We certainly would like to get that. I would like to say something about this gentleman from Buffalo. I was in Buffalo here about three weeks ago and at that time this flat headed nail thing came up for discussion by the traffic managers of your Association, and Tom Powers, Chairman of the group there, asked me to come over, and we got down to brass tacks, and we found that those cars that were coopered with flat headed nails were originating out on the Milwaukee Road here in the Dakotas and they were not coming from this terminal market or any other terminal market, and the reasons for the flat headed nails were that they did not have the duel head nail so since that time we have seen that they got those nails out there and I think that you gentlemen from Buffalo will find that you are getting double headed nails in, and that you can clean your cars now in a lot less time than you did before.

At this point a gentleman (unknown) asked Mr. Murphy why they should have to clean their own cars—too much time and inconvenience involved.

MR. MURPHY: That is really a question for the railroad men. I did meet with the Superintendents' Association over there and some of your traffic managers were present, and it was agreed that they would have the Eastern Railroad Inspection Bureau furnish that service of cleaning cars. Now I don't know whether that is in effect or not, but your traffic managers were in on that discussion and they know what is going on and if it is being handled.

WE HAVE MAINTAINED OUR LEAD-ERSHIP IN OUR FIELD BECAUSE WE HAVE ALWAYS MAINTAINED OUR MECHANICAL AND INDUSTRIAL INTEGRITY.



More Than 10,000 Contracts Completed in 20 Years

LET
"INDUSTRIAL
ERECTORS"
DO IT

An Organization experienced with the erection and design of every type of materials handling and production machinery and equipment.

An Organization accustomed to volume operation and specialized mechanical services.

An Organization tooled for the biggest job—and mobile enough to serve the smallest and most urgent needs.

THE INDUSTRIAL ERECTORS, INC.

ENGINEERS AND ERECTORS OF MATERIALS HANDLING EQUIPMENT, STRUCTURAL SUPPORTS, & PRODUCTION MACHINERY

1316 West Cermak Road

CHICAGO 8, ILLINOIS

ALL PHONES: SEeley 3-1677

At this point there was general discussion about unloading.

(Unknown) Gentlemen, there's one thing that you are trying to pass over and that is the safety element. We've got to appreciate and preach safety around our elevator every day and we're sending our men in to box cars that have knives sticking out on both sides of the doors. What are we going to do about that?

MR. MURPHY: Well, we had that up here for group discussion last Fall and I asked for the opportunity of joining this Association in order to get in on some of these discussions. Now, that personal injury hazard was something that was pretty well kicked around here and I spent a day around Minneapolis following that meeting, trying to get some evidence as to the type of injuries we were having and what we could do to eliminate them and how we could get support (which I couldn't) and since that time I visited some of these other terminal elevator points we have been talking about here and I haven't got much more, so I was going to suggest today that a committee be appointed. I would like to be on that committee myself, and 1 know Mr. MacIver is very much interested in that and so I wondered if he would take a part in it, and we could get hold of this thing and chase down the categories of the injuries - how they occur and what we

can do to prevent them. Now, that's just a suggestion and I don't even know how you conduct these things in this group, but I am a member of a couple of Shippers' Advisory Board and I know when those things come up, that's the way we handle them and we have been doing it rather successfully. We certainly don't want to pass them over—I don't want you to get that attitude. It's got to be stopped that's all there is to it.

MR. MacIVER: Mr. Murphy, it is your suggestion that we appoint a committee to study this problem and I want you to know that I'm going to work on this committee with you and we'll track paper grain doors right down to the end.

MR. MURPHY: Well, Mac, I don't know whether we two alone could do such a good job and I think we ought to have some cooperation on the committee.

(Unknown) The unions are complaining in Buffalo about unloading cars with paper grain doors and I'm afraid one of these days they will simply refuse to do so.

MR. JOHNSON: Just let me say that Mr. Kitching had no patent on giving the traffic man a lot of bad times. But getting back to the paper versus wooden doors I know definitely — and I can make a sworn statement to the effect that there

are receivers of grain and grain products who have refused to buy commodities from a particular plant because they used paper grain doors. In order to avoid losing a customer, they've used wooden grain doors without divulging the destination of that particular car - and I'm sorry for Mr. Murphy. I think he has a wonderful product, but today it isn't a thing that we can use in the grain trade. I'm absolutely honest about it. There is something that must be done. We must consider the hazard to the men who unload the grain and work in the elevators. Further than that, there's hazard to the railroad men. I know of a case where the yardmaster of one particular railroad walked down the yard. He tripped on some of the metal scraps that were removed from a car. He broke his knee cap and has been hospitalized for over a month and a half — perhaps two months — and I think that the railroads through the Advisory Board should have it brought to their attention because up to now the paper door - made by Signode or T. Aldo Johnson or Herman Petersen or anybody else isn't what we can use, and until we do something that is suitable, I say that the carriers should go back to the use of wooden doors. If that concludes the program, Mr. Bredt, I'm happy about it.

J. E. LARSON:—I just wanted to give you this one bit of information

Donalas



YOUR FUMIGATION PROBLEMS



What is your grain fumigant problem? As far back as 1916, grain handlers and elevator operators were bringing their individual fumigant problems to Douglas Chemical & Supply Company. Through the years, Douglas technicians have given personal attention to thousands of separate and different cases. Frequently, in finding the correct solution, new or improved methods are discovered. You benefit from this source of improvement when you order Douglas fumigants and insecticide sprays.

Write today for complete information.

Douglas Chemical and Supply Company 1324-26 West 12th St. INCORPORATED 1916 Kansas City, Missouri BRANCH WAREHOUSES: INDIANAPOLIS, INDIANA; SPOKANE, WASHINGTON; MINNEAPOLIS, MINNESOTA; PORTLAND, OREGON.

with regard to what has been said regarding switchmen and others being injured by the steel bands. Effective September 1st, last, we inaugurated a service in the Twin Cities market of reconditioning the cars that had Signode doors in them, wherein our employees are removing the scrapped doors, then pulling the nails from the door posts until the cars are unloaded. A similar service was started in Galveston, Mr. Weatherly, as of April 1st, and at Houston, and I think you are going to find that that is a big help in eliminating that hazard, and possibly if the carriers feel the move is jusified, they will install the same service in other markets.

FOR PAPER GRAIN DOORS

Following the convention in Minneapolis, Al Halberg, Elevator Superintendent, Pillsbury Mills, Inc., Springfield, Ill., wrote the following letter to GRAIN:

I wish to express myself regarding the subject of paper doors which seemed a touchy subject at the convention. I am grateful to Mr. Bredt for his statement later in the meeting suggesting that we should present facts or figures to substantiate our complaints or favorable criticisms.

Our experience with paper grain doors to date has been very favorable and I should like a statement to that effect published in GRAIN. To date we have unloaded 534 cars and

loaded out 80 cars and have no claim on any of these so far on account of the paper doors. We have had some bulge at the doorway but haven't had a car that couldn't be opened anyplace. All our men like them and have made remarks several times that they wished all cars were coopered with paper.

We don't agree that it takes longer to open a door. We have timed several cars and it takes just half the time to open a paper door than to open a wood door. As far as the hazard is concerned, what's more hazardous than picking up heavy wood doors which are broken and with nails. Wood doors too, have to be handled twice, once to open and then to be thrown into an empty car. We have had no complaints from switchmen and as far as taking extra time to cooper with paper we notify the coopering men a little in advance to take care of that situation. Personally I feel that these paper doors are a step forward in the industry.

WESTERN WHEAT MOSAIC DISEASE

Considerable damage from western wheat mosaic has recently been reported from certain areas in Kansas. Wheat plants submitted from fields in western Nebraska also are believed to be infected with the disease. Plant pathologists at the Nebraska Experiment Station are making greenhouse

tests to obtain more definite identification and field surveys are under way to learn more about the extent and nature of the damage.

The mosaic disease, a virus infection, was first discovered in the United States in 1919. Since that time it has been found in several states, including Kansas and Nebraska. Thus far, seven strains of the virus have been identified. East of the Mississippi River the disease seems to be carried in some manner in the soil. West of the river the virus appears to be transmitted in some other way. Colorado research workers believe the disease is transmitted by grain aphids and suggest that there is a relationship between western wheat mosaic and dryland rot in early planted wheat.

Except for the development of new wheat varieties which are resistant to the disease, no control measures are known at this time. Wheat mosaic has been destructive to scattered areas in the past; but there is no evidence, as yet, that it will cause extensive damage to the current crop in Ne-

braska.

MOORE BARLEY

A new barley variety with strong straw, good malting quality, and moderate resistance to important diseases, especially spot blotch, has been released to certified seed growers.

It is Moore barley developed at

FROM THE ATLANTIC TO THE PACIFIC --- CANADA TO

ELEVATOR and Grain Mill Men have ordered and reordered the BENSON—the original ALL-METAL grain shovel-because its efficiency and economy have been proved in actual use. Whether you require one or a

number of grain shovels, the BENSON will save you time and money--without any danger to laborers or lost time through breakage



A BETTER AND EASIER WAY The BENSON Power Shovel was de-

signed by and for practical grain men who knew that there must be some better way of unloading grain Because it is made of lightweight aircraft metal (weighs only about 19 lbs.), and is scientifically braced to withstand strain, it makes operation easier and faster, facilitates "car clean up," and has PROVED in actual use to be most economical—by reducing your shovel repair and maintenance costs.

NEW PRICES
Standard—30" × 30" \$30.00
Medium—30" × 32"_ 33.00
Large—30" × 34"_ 36.00
All Prices F.O.B. Fort Worth
SHOVEL HANDLES — made
of aluminum alloy — \$3.00 per pair.

REAR VIEW shows reverse side bracing of 3-inch channel and 1½" angle welded into an "A" frame and riveted to shovel plate.

FRONT VIEW shows perfectly smooth metal construction of the front surface, with cast steel hooks for attaching cables.

Order from Your Local Supplier or Jobber

BENSON POWER SHOVEL CO.

501 Sinclair Building

Fort Worth, Texas

the University of Wisconsin in cooperation with the United States Department of Agriculture. It will be available next year.

Spot blotch disease, also known as foot rot, seriously damaged Pedigree 38 in 1943 and 1944. Moore is as good as Oderbrucker in resistance to the disease and s much better than Pedigree 38.

Plant breeders feel that it will be adapted to Wisconsin, northern Illinois and Iowa, central and southern Minnesota, and perhaps areas of higher rainfall in the eastern Dakotas.

Moore was selected from crosses

involving Wisconsin 38, Chevron, and the Finnish variety, Olli.

Heads of Moore barley droop less than heads of other varieties and very few break off after ripening, reports R. G. Shands, plant breeder who did most of the breeding work.

A white spring barley with six rows of smooth-awned kernels in the head, it is shorter than Oderbrucker and about the same height as Wisconsin Barbless, also known as Pedigree 38. The straw is thicker, and Moore stands up much better than the other two. Over five years, Moore lodged only 25 per cent compared to 43 per cent for Barbless and 49 per cent for Oderbrucker.

Yields of Moore and Barbless run about the same and are above Oderbrucker. The hulls are thinner and stick tighter to their kernel, resulting in less threshing injury than in the older varieties.

FLOATING GRAIN STORAGE

Senate Bill 900 which provides storage facilities for grain may be used to arrange for a fleet of floating storage of grain among the nearly 3000 Liberty ships and other vessels available. Decision in the matter must be made by the Maritime Commission which at present feel that the proposal is impractical.



(Photos-Lloyd E. Forsell)

SOGES ASSOCIATES' RECEPTION - 20TH ANNIVERSARY CONVENTION

LEASE HANGAR FOR GRAIN STORAGE

One large hangar and three warehouses at the municipal airport at Garden City, Kan., have been leased by Wayne S. Marteney and C. M. Henderson. The buildings will furnish approximately 500,000 bushels of additional space in Finney County and work has been started on the building of an elevator leg with conveyors. Wheat bins will be installed in the buildings and they will be converted for bonded storage to meet federal loan requirements. This

additional storage will increase capacity in Finney County to 2,886,000 bushels.

COMMERCIAL FEED EXPANDS

The preliminary report of the Census of Manufactures for 1947 confirmed the evident expansion of the commercial feed industry. The report showed a total of 2,689 establishments in 1947 compared with 1,383 in 1939. The total value of their output in 1947 was figured at \$2,130,000,000 or an increase of 430% over the 1939 total of \$402,000,000. Grains used by

the industry in million bushels were: Barley, 30.6; Oats. 112.6; Sorghum, 16.6; Soybeans, 7.2; Wheat, 35.1; and other grains, 2.0.

WHEAT CROP FORECAST 2% UNDER RECORD

The June estimate of the U.S. Crop Reporting Board indicates production of 1,336,976,000 bushels of wheat. This is 4% above the 1948 crop, more than 33% above average, and only 2% below the record of 1,367,186,000 bushels in 1947.



(Photos-Lloyd E. Forsell)

SOGES BANQUET AND ASSOCIATES' ENTERTAINMENT PROGRAM

ROUND TABLE SESSIONS SOGES CONVENTION

PERSONNEL RELATIONS

Recorder: Ernest O. Ohman Osborne-McMillan Elevator Co. Minneapolis, Minn.

Our Chairman, Bob Bredt, started us off by stating that not enough attention has been given to this very important phase of our operation. In other words, some of us are still waiting for a labor market. This was immediately answered by a counter question.

How good can we afford to be to our men? One particular plant Superintendent stated that he paid his men ten cents over the prevailing scale, that he gave them time off for coffee and rest periods, time off for cleaning and washing up before going home, and many other privileges that were not in their contracts. And still, for some un-explained reason, these seemingly well treated men walked off their jobs for any little thing, they slowed down operations, they created many incidents that gave evidence that they were very unfaithful workers. To solve this particular plant's problem, this group recommended a change in the managements' attitude and policy.

Here are a few samples: Staff meetings. Let your men know what you want. Train your foreman. Be sure that he is fit to be a foreman, because after all, no matter what the management wants, if your foreman fails to carry out the plans all your efforts are lost. Your foreman is your key man. He must know how to deal with men, and it is up to the plant superintendent to find such a foreman. Our biggest job today, is to convince our men that we are

MAGNESIUM LIGHTNESS IN . GRAIN SHOVELS

Imagine a grain shovel 28" by 32" made of metal, yet weighing only 191/2 lbs. That's what you get in magnesium—the new lightweight miracle metal. MAGCOA Grain Shovels will save you money over a period of time because of their greater resistance to wear and greater handling efficiency.

- Easy, non-fatiguing to handle • Sturdy, long-wearing rigid construction
- Reinforced at stress points for greater strength
- Balanced design for maneuverability
- Quickly reversible and replaceable striker plates



• EASTERN DIVISION: 30 Rockefeller Plaza, New York 20, N. Y. • WESTERN DIVISION: 831 S. Flower St., Los Angeles 14, Calif.

EAST CHICAGO, INDIANA

sincere and honest with them and that we are fighting their battles as well as our own. In other words, our problems are mutual today as well as they were yesterday and will be tomorrow. Labor is dependent upon management to no greater degree, than is management depended on

We must regain the confidence of labor that was lost years ago through selfish interests. Put the labor relations back where they rightfully belong - take them out of the hands of the racketeers and the Communistically controlled organizations. You ask how we can do this? Simply by controlling the labor organizations from within - this can be done. In other words, the men themselves must do this job for management. Here are some suggestions made in the line of obtaining our employees' Good Will and Cooperation in performing this task. Make the man feel that he is wanted, not only as a worker, but as a part of the plant in which he works. If you need a man, treat him like a man. Be friendly. Always keep your promises. Don't favor any one worker even though you some times feel tempted to do so. Know your own job and chances are you will be successful in keeping good men, because all men respect knowledge. You some times may be in a position to give him an hour or so. Don't dock him for every minute if you think his leave is necessary. Be human and try to understand him. Even if you fail on this you should at least try. Train your men the best you know how. You might do this by appointing one of them as a training operator. You can create good will by rewards for favorable rating by your foreman, subject of course, to your approval as well as the management.

Some plants have suggestion systems, and reports on most of these are favorable. In other words, try to create an atmosphere of one happy family.

FEED AND CEREAL

Recorder: Robert L. Ranney Ralston Purina Co. Minneapolis, Minn.

The first subject brought up for discussion was granulated pellets or crumbles. Immediately pointed out by several members was the fact that as yet crumbles have not become popular in the eastern part of the United States. The Midwesterners however warned those members that it was coming and that there was no use in getting overly excited.

There were several short discussions about the types of rolls, corrugations, speeds, and the efficient packaging of pellets. The type of sifters and screens used to scalp and remove fines from the crumbles, and a general comparison of capacities and sizes of the pellets most often used in making crumbles came in for attention.

The question was asked if there had been any experimentation on other methods of manufacturing this material. One member reported that experiments had been carried out using an expeller with the solid barrel to make a cake from which crumbles would be easily cracked. Apparently not much advantage was attained because of the high pressures, greater power, and the other problems attending the operation of an expeller for compressing the mash feed.

The experience of making crumbles from the Buckley grinder, and even by a corn cutter, was briefly reviewed.

Next came an interesting discussion on alfalfa pellets. One member stated that in a mill in Buffalo alfalfa pellets have been successfully stored for considerable periods of time in regular grain bins. The big problem however showed with the pellets that were reduced from the hammermills into the meal ahead of the feeder bin. Apparently some physical characteristics of the alfalfa pellet seriously wears knife hammers. Various types of hammers were described and commented upon as were their wearing qualities.

Since alfalfa pellets are an improvement over bulk meal, as far as handling bulk cars are concerned it was suggested that perhaps pneumatic unloading equipment would be a definite possibility.

Packaging methods were then the subject for discussion and the question was asked whether an auger packer which could handle 6 or 7 bags per minute handled by one man, would be acceptable to feed millers even if the operation included bag closing. A saving of about \$4 or \$4½ per thousand for each inch of cotton which is taken off of bag material is realized. A high speed auger packer, it was decided, would definitely have possibilities in all larger feed plants.

Various labor-saving methods were commented upon and it was pointed out that in some sections of the country featherbedding problems often offset the gains derived from these methods.

Time was devoted to an explanation of the maximum amount of molasses which can be safely used in various types of feed and it was pointed out that this was dependent upon a number of factors including the hygroscopic properties of the other ingredients in the formulas, weather conditions, humidity and other pertinent conditions. In general it was agreed that 20% seemed to be the maximum for the average formula which would be pelleted without first drying. Up to 25% in unpelleted dairy feeds and up to 40% are used when driers are made part of the system.

A short discussion revolved about the experience of those using both the expeller and solvent meal as far as pellet production is concerned and it was agreed that the solvent meal seemed to make the various formulas pellet a bit more slowly.

Meat pulp, hanging in bins along with other materials which do not flow freely was discussed as was vibrators and air jets for both wood and steel bins. For concrete bins air jets were considered the only possible answer.

BARLEY AND MALTING

Recorder: Lloyd E. Forsell Albert Schwill & Co. Chicago, Ill.

A concise report to be released at a later date is forthcoming because of this roundtable's important data of valuable information and due to the length of the meeting. At our convention in Cedar Rapids in 1946, by resolution a committee was formulated to serve by publication in GRAIN and whatever other source necessary, to further the workings of the Midwest Barley Improvement Assn. The association's director, Dr. John Parker, has from time to time released advantageous data and information.

This roundtable discussion was conceded to be the best we have ever held with a good many of the terminal elevator men beng aware for the time, of the maltsters' problems. To further the release of a wealth of information, a new committee was formed headed by Dale Wilson, Northwestern Malt & Grain Co., Chicago, and in association with Ed Josephson, Schreier Malting Co., Sheboygan, Wis., Henry Anderson, Bunge Corp., Minneapolis, John Belanger, Manitoba Pool Elevators, Fort William, and Lloyd E. Forsell. This committee will be advised and guided by Dr.

The questions asked at this meeting and the answers given in the table discussions will be prepared for publication in GRAIN. We have a very heavy program to take on this year and with your committee and each member

actively participating, we will take your ideas to every terminal elevator and processing plant in North America. Any questions or information or communications should be directed to the SOGES offices in Chicago, from where the committee will act.

(Editor's note: The first of the articles prepared by the committee will appear in the August issue of GRAIN and subsequent articles will be published in timely issues.)

NEW S.O.G.E.S. MEMBERS

- 825 Ralph A. Myhre, Superintendent, Northwest Linseed Division, Falk & Co., Inc., Minneapolis, Minn.
- 826 Albert C. Collins, Elevator Superintendent, Minnesota Linseed Oil Co., Minneapolis, Minn.
- 827 James T. Cryan, Peerless Mill Supply Co., Buffalo, N. Y.
- 829 W. F. Weatherly, Elevator Superintendent, Galveston Wharves, Galveston, Texas.
- 830 Calvin H. Mitchell, Chickasha Milling Co., Chickasha, Okla.
- 831 George Collins, Stratton Grain Co., Milwaukee, Wis.
- 832 Charles A. Crowley, Archer-Daniels-Midland Co., Duluth, Minn.
- 833 Frederick N. Leishman, W. C. Wiedermann & Son, Inc., Kansas City, Mo. 834 Emil Paulson, General Mills, Inc., Minneapolis,
- Minn.
- 835 Arthur C. Bredesen, Jr., Arid-Aire Mfg. Co., Minneapolis, Minn.
- 836 Blaine L. Sidders, Russell-Miller Co., Minneapolis,
- 837 Eugene A. White, Empire Storage Co., Kansas City,
- 838 J. W. Dickinson, Imperial Belting Co., Chicago, Ill.





FOR EFFECTIVE DUST AND GAS PROTECTION

ROBERTSON Explosion Ventilators

WILL

Remove the more explosive fine dust from the leg by continuous gravity action

WILL

Release pent-up gases and flames in case of an explosion

WILL

Minimize the possibility of a secondary explosion by continuously venting gases

ROBERTSON Ventilation Engineers

WILL

Inspect your elevator and recommend proper sizes and number of ventilators to secure maximum protection at minimum expense.

Write Now for Details

H. H. ROBERTSON CO.

Farmers Bank Building Pittsburgh, Pa.

SAFETY PROGRAM ORGANIZATION

Clarence W. Turning SOGES SAFETY CONTEST DIRECTOR.

Years ago the accident figures for the grain milling group and that of the grain elevators, were about the same. However, the last figures available from the National Safety Council gives a 3-year average ending with 1947. This shows:

Milling Frequency 21.58 Severity 2.76
Gr. Elevators Frequency 28.10 Severity 3.14

These figures indicate that we are slipping, not only in comparison with the mills, but also in comparison with the National average for all industries reporting to the NSC. Our score is at least twice as high as this average.

All that has saved you from a drastic increase in insurance rates, has been the high pay-roll level. When pay-rolls start to decrease, and they begin to figure compensation claim costs, against less dollars of pay-roll, look-out. That is just another reason for setting up a safety program that will function and which will eliminate accidents. The extra work you do for safety in the future, will not only save lives, but it will save many dollars in insurance costs.

We have considerable material available suitable for printing and distribution, but to do this, management must supply adequate financial support for your Safety Program. There are also some safety aids, available from the National Safety Council and other sources, which should be purchased and made available to your members. I doubt, if any superintendent is willing to sift through the large volume of safety material which is available, but we can do this for you, and call your attention only to such items as seem to fit your needs.

Numerous other industries have made great strides in accident prevention, and you can do the same, if each will do his part to plan, organize and carry out a safety program that will start with fundamentals and attack each accident problems as it comes to light.

PRICE SUPPORT PROGRAM FOR 1949 CROP WHEAT

The Department of Agriculture has announced a price support program for 1949 crop wheat at 90 percent of parity. The wheat support programs will be operated through (1) farm storage and warehouse storage loans, (2) purchase agreements, and (3) direct purchases of wheat in Georgia and South Carolina. The actual support price will be computed on the basis of 90 percent of the wheat parity price as of the beginning of the marketing year, July 1, 1949, as required by law.

Eligible wheat shall be wheat produced in the continental United States in 1949, grading U. S. No. 3 or better, or grading U. S. No. 4 or No. 5 solely on the factor of test weight.

In general the 1949 wheat support program will follow the pattern of the 1947 and 1948 programs, but will be available to farmers from time of harvest through January 31, 1950. This makes the new program available for an additional month, as compared with 1947 and 1948 programs. Loans will mature April 30, 1950, or earlier on demand, and holders of purchase agreements must declare within a 30-day period ending April 30, 1950, or on such earlier date as may be determined, their intention to sell to the Commodity Credit Corporation.

Designed to provide adequate supplies to consumers and establish a floor price for producers, the 1949 program will make funds available immediately to producers who place wheat held in storage under loan and enable them to market the wheat at a later date. Producers who are not in need of immediate cash may sign purchase agreements and thereby be assured of selling their wheat at the price support level at a later date.

Since wheat cannot be safely stored in Georgia and South Carolina for an extended period of time, the direct purchase program which has been available in these States will be offered to producers for another year, pending development of local facilities to more adequately condition grain for safe storage.

Wheat price support programs have been operated by the Department of Agriculture for the past 11 years and have covered, through loans and purchase agreements, a total of more than 2 billion bushels of wheat. The first wheat loans were made in 1938 and quantities placed under loan have varied from a high of more than 408 million bushels in 1942 to a low of about 22 million bushels in 1946. In 1948 approximately 251 million bushels of wheat were placed under loan and about 113 million bushels were covered by purchase agreements.

FLOUR AND MEAL 1947

Manufacturers in the Flour and Meal Industry shipped products valued at \$2,511 million during 1947, according to preliminary figures released May 19 by the Bureau of the Census, Department of Commerce. This is an increase of 286 percent over the \$650 million value of products reported by this industry in 1939, when the last Census of Manufactures was taken, but shows a drop of 900 mills during this period. Value added by manufacture in the industry during 1947 amounted to \$410 million, an increase of 185 percent over the \$144 million value added in 1939. Value added by manufacture is calculated by subtracting cost of materials, supplies, containers, fuel, purchased electric energy, and contract work from the value of products. For some purposes, particularly for comparing one industry or group of industries with another, it is the most satisfactory Census measure of the economic importance of an industry.

Average employment in the industry amounted to 39,458 in 1947 as compared with 35,978 in 1939. Salaries and wages paid to all employees increased 141 percent from \$49.4 million in 1939 to \$118.9 million in 1947. The industry's expenditures for new plant and equipment during 1947 totaled \$27.8 million as compared with \$6.9 million for 1939.

The Bureau reported that 254.3 million sacks of plain white flour, valued at \$1,501 million, were shipped by all manufacturers included in the 1947 census. This represents an increase of 35 percent in quantity and 287 percent in value over the 187.9 million sacks valued at \$388 million produced for sale in 1939. Shipments of mixed flour made in flour mills increased from 19.4 million sacks, valued at \$48 million, to 40.1 million sacks, valued at \$274 million, an increase of 107 percent in quantity and 471 percent in value.

GENERAL STATISTICS FOR THE FLOUR AND MEAL INDUSTRY, UNITED STATES TOTALS: 1947 AND 1939

(Money figures and man-hours in millions)

Item	1947	1939
Number of establishments	1,243	2,143
All employees:		
Number (average for the year)	39,458	35,978
Salaries and wages (total)	\$118.9	\$49.4
Production and related workers:		
Number (average for the year)	30,722	24,771
Man-hours (total)	74.4	n.a.
Wages (total)	\$85.7	\$28.4
Value added by manufacture ¹	\$410	\$144
Cost of materials, fuel, electricity and contract work	\$2,101	\$506
Value of shipments ²	\$2,511	\$650
Expenditures for new plant and equipment	\$27.8	\$6.9
n a Not available.		

¹For 1947, value of shipments less cost of materials, fuel, electricity, and contract work. For 1939, value of production less cost of materials, fuel, electricity, and contract work.

²Value of production for 1939.

Prepared by Bureau of the Census, Industry Division, Foods Section

CASH IN NOW on the **ACCURACY**

of a

SEEDOURD

Automatic Sampler!



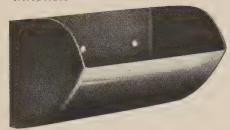
You can help yourself to greater profits immediately by installing a SEEDBURO AUTOMATIC SAMPLER. It's designed to obtain a CORRECT AND TRUE SAMPLE of grain from cars or cargoes -loading in or out.

One elevator reports: "No matter how unevenly cars are loaded, the Seedburo Automatic Sampler gets a PERFECT AVERAGE SAMPLE." And, like many other elevator operators, you'll find, too, that the SEEDBURO AUTOMATIC SAMPLER provides the only sure way of getting a TRUE, AVERAGE sample from an unevenly loaded or "plugged" car of grain, seed, meal or feed! Send for descriptive literature . . . today!



618 W. Jackson Blvd., Chicago 6, Illinois

Weller Pat. No. 1,944,932





Chinese Doesn't Mean Anything To An Eskimo

Capacity doesn't mean anything either unless an elevator bucket discharges completely.

The high speed

CALUMET CAPACITY CUP

is scientifically constructed with a patented Logarithmic Curve design that provides maximum load capacity and assures a complete discharge.

Operates efficiently over any sized pulley at any permissible speed.

ASK YOUR JOBBER Immediate delivery on most sizes.

B.I.WELLER CO.

327 S. La Salle St.

Thirty Five Years Of Service To The Grain Industry

AUTHORITY TO OWN STORAGE GIVEN CCC

The charter amendment giving Commodity Credit Corporation the authority to acquire real property such as grain storage facilities has been approved by Congress and awaits the President's signature. The Senate, which turned down the first conference committee report, passed on the second report which includes provisions for the appointment of CCC directors. This new authority given CCC puts on trial the repeated assertions of government advocates of the plan that it did not intend to enter into competition with existing private trade facilities in the grain storage field.

INCREASE IN GRAIN INSPECTION APPEAL FEES:

An increase in the fees charged for appeals from inspections under the U.S. Grain Standards Act was announced June 13 by the U.S. Department of Agriculture.

The current fee for a carload is \$2. This is raised to \$3. The appeal fee for cargoes and bin-runs remains at \$1 per thousand bushels with the minimum raised from \$2 to \$3. No changes are made in the appeal fees for submitted samples and truckloads.

The current appeal fees have been in effect since 1942. The new fees, which become effective August 1, 1949, will bring the rates into line with increased costs of handling appeals.

GRAIN STORAGE BILL

Senate Bill 900, passed by Congress on its second action, provides that grain storage facilites can be acquired under direction of CCC. The original bill was rejected because it concentrated such power in the hands of the Secretary of Agriculture appointing five directors of the \$5 billion program without Senate confirmation. The second bill tends to guarantee that the CCC will not build storage facilites that interfere with private interests.

PREDICT WHEAT CURBS IN 1950

Continuing favorable conditons for a large 1949 wheat crop may force the U.S. Department of Agriculture to proclaim by law acreage allotments and possible marketing quotas for the 1950 wheat crop. The USDA is at present conducting an extensive survey to determine whether such drastic action will be necessary.

FROEDTERT TO INCREASE STORAGE

The Froedtert Grain & Malting Co., Inc., Milwaukee, Wis., announced plans to increase its aggregate grain storage capacity to 11 million bushels. Construction is expected to be completed in 4 months on a new 1,800,000 addition.

NEW GRAIN ELEVATOR AT SELMA, ALABAMA

A contract for the design and construction of a new \$250,000 grain feed elevator for the Black Belt Elevator and Feed Company, at Selma, Alabama, has been awarded the Rust Engineering Company, Birmingham, Alabama, and Pittsburgh, Pa. The elevator designed to hold an estimated 100,000 bushels of grain and feed will have a batch mill in conjunction with a capacity of 100 tons of feed per 8 hour day, and 400 bushels of meal per 8 hour day. The elevator will tower 140 feet above the ground and all building construction will be of concrete. sliding form method of construction will be used throughout. A corn shelling plant and a seed cleaning plant will also be included.

ACME PURCHASES ELEVATOR

The 300,000 bushel elevator at Guthrie, Okla., has been purchased by The Acme Flour Mills Co., Oklahoma City, and has taken over its operation. Guthrie is about 30 miles from Oklahoma City on the Santa Fe line.

NORRIS BUYS BURLINGTON ELEVATOR

Norris Grain Co. announced completion of purchase negotiations of the Burlington Elevator, St. Louis, Mo., from the Burlington railroad. The Norris organization has leased the 2½ million bushel elevator since 1936 and plans later to add 2 million bushels more capacity to the house which is of concrete and wood construction.

OMAR, INC., SELLS PROPERTIES

The sale of the milling properties of Omar, Inc., Omaha, to the Colorado Milling and Elevator Co., Denver, has been announced. All units, including the grain storage elevator at Omaha, and the elevator at Denver were included.

STORAGE ADDITION

Construction has begun on a 100,000 bushel capacity addition to the Mountain View Grain Co. elevator at Mountain View, Okla.

OREGON ELEVATOR DESTROYED

The large grain-filled elevator of the Moro Grain Growers, Moro, Ore., was recently destroyed in a spectacular fire that caused loss estimated at \$350,000. More than 80,000 bushels of wheat were burned.

67 FLOUR MILLS CLOSE DURING YEAR

The Millers National Federation in a summary compiled from sources within the milling industry report that 67 mills, with a total daily capacity of 98,670 sacks of flour have been closed during the past year.

BRUSHES RIGHT—FROM THE START—





We can furnish separator brushes for any machine.

The STAR Warehouse Push Broom
This is the broom that is used by most large terminal elevators for sweeping grain out of box cars.

Brushes for Every Commercial and Industrial Use
FLOUR CITY BRUSH CO., Minneapolis 15, Minn.

SAFETY COMMITTEE REPORT

Safety as a general subject is a decidedly dry one, but Safety Promotion can be put across successfully by constant repetition and mainly if the Superintendent himself is sold on Safety and will constantly demonstrate this to his employees by teaching and practicing Safety himself. We as a committee shall endeavor to help you in putting across your Safety Program by reserving and making use of space in each issue of "Grain" on Safety Promotion. Reports of unusual accidents will be published and information passed on in order to elimnate any repetition of such accidents. Any member of the Society may feel free to request help on any question regarding Safety and we as a committee will be glad to receive any suggestions from the Society members. The Committee requests that all members join the Safety Contest and at the end of each month send in their Safety Records so they may be compiled and kept up to date in the proper manner. If we can get these reports, we can publish the facts in "Grain" and so keep you posted on just where you stand in the contest from time to time. All Chapter Presidents can help this move ment along by introducing it at their local meeting. We are asking your sincere cooperation in the promotion of the Safety Program.

W. H. Teppen Russell-Miller Milling Co. Duluth, Minn. John Kitching G.L.F. Elevator Buffalo, N. Y.

Frank E. Carlson Underwriters Grain Assn. Chicago, Ill.

Lewis Inks Quaker Oats Co. Akron, Ohio S. L. Champlin Archer-Daniels-Midland Co. Minneapolis, Minn. Herbert A. Straley Port Authority Grain Terminal Brooklyn, N. Y.

INNER SPRINGS AND BACK STRAINS

George H. Steel Ralston Purina Company Sometime ago, while visiting at one

of our branch plants, the superintendent and I were discussing a back strain case that had developed into lost time that day.

We decided to go out to the employee's home and talk with him to get additional facts.

The employee was awfully proud of the fine inner spring mattress on his bed. In fact, he told us quite a bit about how nice it was.

That got me to thinking. Doctors advise people with weak backs to insert a board between the springs and the mattress.

DUST EXPLOSION HAZARDS

The revisions in the Code for Country Grain Elevators and for Terminal Grain Elevators were adopted as recommended by the Committee on Dust Explosion Hazards at the 53rd Annual Meeting of the National Fire Protection Assn., May 16-19, at San Francisco. The revision was published in the May issue of GRAIN.

DR. PRICE RECEIVES U.S. AWARD

At a special ceremony on May 16 on the Washington Monument grounds in Washington, D. C., Secretary of Agriculture Charles A. Brannan, presented the Superior Service Award for outstanding service to agriculture to Dr. David J. Price. Dr. Price, an honorary Member of the SOGES was presented with this award for his work in the development of methods for the prevention of grain dust explosions and the prevention of fires on farms and rural communities in the United States.

The more common use of inner springs throughout the nation might be the cause for the increased number of back cases that we are having.

Fifteen or twenty years ago we had a few back strains, but nothing like the number we are having now.

Could more luxurious living in the form of expensive mattresses be the

Of course, these cases are still compensable even if a mattress causes the trouble, because our work aggravates a pre-existing condition.

But if a survey should show a correlation between the two, we might be able to start a campaign that could help.

UHLMANN ESSAY CONTEST

The Chicago Board of Trade is sponsoring the Uhlmann Awards Competition with prizes totaling \$3000. The awards will be given for the best original research in grain marketing and agricultural economics. The grand prize is \$1000 and will be awarded for the best essay or manuscript describing the commodity exchange system of free marketing. Fourteen other prizes will be awarded in two classes; college and University undergraduates, and professionals engaged in grain directly. The competition was made possible by a grant from Richard F. Uhlmann, president of the Chcago Board of Trade in a memorial to his father.

SOUTHWEST PROTESTS STORAGE CRISIS

Representatives of the Southwestern wheat regions protested in Washington that CCC's failure to move its wheat acquired under loan defaults provoked the crisis of plugged elevators.

EVERYBODY'S BUSINESS

GOOD HOUSEKEEPING is everybody's job. BAD HOUSEKEEPING is everybody's danger.

The most important single factor in the prevention of accidents is GOOD HOUSEKEEPING in the plant; order and cleanliness in and around a work area or unit.

Thousands of people get hurt every year just because of poor housekeeping. They aren't injured by dangerous machinery or because of hazards on the job; they get a broken leg or a cracked skull because somebody left a ladder sticking out in a dark corner or let a piece of equipment stay where it didn't belong.

In any safe plant, well defined aisles are a must. Anything that is allowed to project into the aisle, beyond a certain point, creates a potential accident spot. People passing by - sometimes in a hurry, sometimes just not thinking about possible boobytraps-are likely to stumble and fall. Empty hand trucks are particularly dangerous if they are out in the aisle; they are low, and often you can't see them in time to save yourself if you are coming around a

If you ever leave supplies or equipment in an aisle, you are likely to say, "I only left it there for a minute". Sure, we know — but — THOSE MINUTES ARE ACCI-DENT MINUTES! If you have ever been in an accident, you know that it happened in a split second. It wasn't timed or planned. There was

no warning. There almost never is.

A minute is plenty of time for someone to have a bad fall!!

Housekeeping is not the other fellow's job. It's up to every one to see that any material for which he is responsible is in its place and that the aisles around his working area are clear.

The storage of tools and equipment is a very important part of good housekeeping. "A place for everything and everything in its place" is a first-rate safety maxim; if you live up to it, you'll be taking a long step toward accident prevention.

Nobody wants to be responsible for an injury to someone else. Nobody wants to be the victim of an injury. Good housekeeping is such a simple way of preventing accidents -let's all get on the job! (ARCADY WONDERBLAST)

NEW WHEAT HIGH IN MOISTURE

In a report from the Southwest warning is given that new crop wheat is showing as high as 20% moisture, a dangerous content to grain elevators. It is recommended that such high moisture wheat be refused especially this year as the crop indicates an unusually high moisture content average.

JOHN F. SUHRING DIES

John F. Suhring, president of the Appraisal Service Co., Inc., Minneapolis, Minn., died June 21 at Billings, Mont. Death followed a 50-ft. fall from a grain elevator manlift. Mr. Suhring organized the Appraisal Service Co., which operates on a nation-wide basis, specializing in mill, elevator and plant appraisals.

FUMES KILL WORKER

A grain elevator worker died after being overcome by heat and fumes from fermenting soybeans in a 100 foot grain bin at a feed plant in Forest Park, Ill. Another employer was overcome in attempting to rescue his fellow worker.

CAR UNLOADER

Stephens-Adamson Mfg. Co., Aurora, Ill., has available, on request, an illustrated, sheet prepared for the SOGES convention, describing the S-A Box Car Unloader.

VIBRATING CONVEYOR

The Whitley-Carrier Co., Louisville 2, Ky., has available on request, a new brochure on their Vibrating Conveyor. The principle of the natural frequency operation of the conveyor is fully explained in the literature.



THE FACT STILL REMAINS
THAT
SUPERIOR ELEVATOR CUPS
ARE
MADE STRONGER
WILL
LAST LONGER
HAVE
GREATER CAPACITY

and will operate more efficiently at less cost than other elevator cups.

"DP" - "OK" - "CC" - "V"

write to

K. I. WILLIS CORPORATION MOLINE ILLINOIS

for names of distributors and analysis form No. 20

ERIEZ 1949 CATALOG

A new twelve page, two color catalog describing the complete line of Eriez permanent non-electric magnetic separators and electronic metal detectors, is now available. Complete specifications regarding weights, sizes and strength comparisons for various chute and spout magnets are given as well as tables of operating capacities for permanent magnetic pulleys, drums, pneumatic line assemblies, pipeline traps, road sweepers, ferrous filters, floor sweepers and pipe rolls.

All pieces of equipment are fully illustrated through the use of photographs and engineering drawings.

Savings realized through the use of permanent magnets, the importance of application engineering and the essential of good permanent magnets, are fully explained. Also discussed are factory engineering and laboratory services offered by the Company.

To receive your copy, write for Catalog No. 14, Eriez Manufacturing Co., 908 East 12th St., Erie, Pa., U.S.A.

PORTABLE CONVEYOR

The pre-engineered Stevedore, Jr. portable power belt conveyor is described and illustrated in a new four page, two-color folder issued by The Rapids-Standard Company, Inc., of Grand Rapids, Michigan, manufacturers of Rapistan material flow equipment.

Shown in the folder are horizontal and inclined applications of the Stevedore, Jr., which may be used for loading and unloading trucks and boxcars, moving materials into balcony bins, stacking, or for boosting in a gravity conveyor line. The unit will handle all kinds of material in cartons, cans, bags, rolls etc. Copy in the folder explains versatility features of the Stevedore, Jr. which permit it to be wheeled from job to job; or to be changed in length, pitch or direction to fit the application.

A copy of the Stevedore, Jr. folder, Form SJA-149 may be had by writing to The Rapids-Standard Co., Inc., Dept. SF-10, 342 Rapistan Bldg., Grand Rapids 2, Michigan.

FOR SALE — USED MACHINERY

3—14 cylinder Rich Ring Graders built in two sections. Cylinders set as follows: one-third at 5/64 and twothirds at 6½/64.

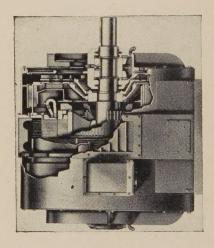
2—14 cylinder Rich Ring Graders built in two sections. Cylinders set as follows: one-third at 5½/64 and two-thirds at 6½/64.

For further details address 9·G·1, % GRAIN MAGAZINE, 327 S. La Salle Street, Chicago 4, Ill.

COPPER-FIN, TOTALLY ENCLOSED, INDUCTION MOTORS

Type CS, totally-enclosed, fancooled, squirrel-cage motors with copper fins embedded in the stator laminators for additional cooling are announced by Westinghouse Electric Corporation. Because of the excellent heat transfer ability of copper, motors of this design require little more installation space than open motors of the same rating.

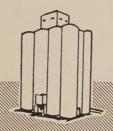
Rapid conduction of heat from the stator is accomplished by interleaving circular copper punchings at intervals among the core laminations. These copper fins extend beyond the core iron so that the heat picked up can be transferred to the external cooling air. Additional copper fins are fabricated with steel parts to form large, cylindrical heat exchangers at both ends of the motor around the end turns. Heat picked up by internal air circulating through the rotor is transferred through these heat exchangers to the external cooling air.



Motors are suitable for application in central stations, cement mills, flour mills, coal pulverizing plants, grain elevators, steel mills, and in other locations where the atmosphere is contaminated with dust particles that are injurious to an open motor. These motors are not designed for outdoor locations where snow or other foreign materials may be encountered in such quantities as to obstruct the ventilating openings.

Type CS totally-enclosed, fancooled motors are available in large ratings up to approximately 1500-hp at 1800 rpm, class B insulation, 75 degrees C rise, and other electrical characteristics similar to those—that can be obtained in standard, open, squirrel-cage induction motors.

Further information concerning the Copper-Fin, Totally Enclosed, Induction Motors may be obtained from the Westinghouse Electric Corporation, P. O. Box 868, Pittsburgh, 30, Pa.







IN TERMINAL, MILL AND COUNTRY ELEVATORS ~

Weevil-Cide has proven more satisfactory because it combines effectiveness with safety, non-inflammability, convenience, economy and honest dosage recommendations for real results.







HAS THE SUN EVER DISCOVERED A Better METHOD OF SHINING?



BEFORE



AFTER

No! Old Sol continues to shine in the same dependable way he has . . . for who knows how long.

The B. J. Many Co., Inc. doesn't change methods operation either.

Why? Because, never, in nearly half a century of esearch has there been developed proven methods or materials that provide a more thorough and enduring job of repairing and weather proofing than those so successfully employed for many, many years by the B. J. Many Co., Inc.

Elevator structures repaired and weather-proofed by the B. J. Many Co., Inc. fifteen and more years ago are today in a high state of preservation, moisture-tight, weather-proof.

When, if ever, better methods are discovered and proven they will be adopted by the B. J. Many Co., Inc.

Descriptive literature upon request. Structures inspected and cost estimates submitted without obligation on your part.

B. J. MANY, CO., Inc.

AGC AMERICA

30 North La Salle Street., Chicago 2, Illinois

BRANCH OFFICES: 1100 Battimore Life Building, Baltimore 1, Maryland—827 N. W. 31st Street, Oklahoma City, Oklahoma. AUTHORIZED AGENTS: Mr. H. W. Webb-Peploe, 409 Monmouth Road, West Long Branch, New Jersey.— Pioneer Sand and Gravel Company, Inc., 901 Fairview Avenue, North, Seattle 11, Washington — Northland

Machinery Supply Co., Ltd., 203 Herdisty Street, Fort William, Ontario, Canada — Northland Machinery Supply Co., Ltd., Winnipeg, Manitoba, Canada —Toronto, Canada.